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paper in the shade are of a dull yellowish green ; but if these be now exposed to the direct rays of the sun, for about ten minutes, they will be found to have assumed a bright bluish green, which they do not again lose.

During decomposition in water a fluid is produced, which is of a claret red under reflected light, but of a fine grass-green when viewed by transmitted light.

Dr. Allman also read a notice of a species of *Peridinea*, which had just shown itself in such inconceivable multitudes as to give rise to a peculiar coloration of some of the ponds in the Phœnix Park. During the last three weeks a spectator on the banks of the large ponds in the Park must have been struck by a brown colour assumed by the water. This colour was sometimes uniformly diffused through the water ; at other times it appeared as dense clouds, varying from a few square yards to upwards of 100 in extent.

A microscopic examination of the water proved the brown colour to be entirely due to the presence of a minute organism, which the author preferred referring to the genus *Peridinea*, Ehr., rather than constructing for it a new one, though it does not exactly agree with any published generic description.

It is about the $\frac{1}{1000}$ th of an inch in diameter, and approaches in form to a sphere divided by a deep annular furrow into two hemispheres, on one of which is situated another furrow, springing vertically from the annular furrow, and terminating at the pole. The author viewed the organism under consideration as essentially a solitary cell ; it encloses reddish-brown granular contents, and a large, well-defined central nucleus. In the midst of the contents are numerous clear spaces, of various sizes, which, however, appear to be oil-drops rather than true vacuolæ.

In most instances a deeper-coloured ocelliform spot was evident near the polar extremity of the vertical furrow.

It is eminently locomotive, swimming with great activity by the aid of a flagelliform appendage, which springs from the vertical furrow near the point of junction with the other, and of very minute vibratile cilia, which seem distributed over the surface, and not confined to the furrows, as maintained by Ehrenberg, in the species of *Peridineæ* described by him.

Before death, or, perhaps, when only passing from a motile to a quiescent state, the contents contract towards the centre, and then an external transparent and perfectly colourless vesicle becomes visible, while the flagellum and cilia disappear. The contracted contents present a very definite and generally spherical boundary, and are evidently included in a distinct cell; the resemblance of this internal cell to the primordial utricle, and that of the external investing vesicle to the cellulose wall of the vegetable cell, are too obvious to be overlooked, though the iodine and sulphuric acid test failed in indicating the presence of cellulose. The external investing vesicle is non-contractile; under pressure it is easily ruptured, and the minutely granular contents, mixed with large oil-drops (?), escape upon the stage of the microscope. The nucleus is then easily isolated; it is of an irregular, oval form, quite colourless, and marked on its surface with curved striæ.

Multiplication is effected by transverse division, which takes place parallel to the annular furrow, and in the unfurrowed hemisphere. This process appears to be invariably preceded by a division of the nucleus, and the author had succeeded in isolating nuclei, presenting almost every stage of transverse fission.

Believing the species now described to be new, the author named it *P. uberrima*.

[Since the communication of the above facts to the Academy, the coloration of the ponds has much increased in intensity. On the 9th of July the author again visited them. The colour in some parts was then of so deep a brown, that a

white disc, half an inch in diameter, became invisible when plunged to a depth of from 3 to 6 inches, while a copious exit stream, which constantly flowed away from one of the ponds, presented the same deep-brown tint.]

Rev. H. Lloyd, D. D., read a paper on the meteorology of Ireland, in reference to the tracks of storms in Ireland, so far as the law of their distribution has been determined in Ireland, by means of the simultaneous observations of 1851.

Mr. D. Moore read a notice of the vine disease in Ireland :—

“ It is a remarkable fact, that two diseases bearing much similarity in appearance, and producing equally fatal effects on their victims, both previously unknown, should have occurred in Europe during the same year, and that they should have attacked two species of plants of more importance to the inhabitants of these countries, than, perhaps, any other two under cultivation, namely, the potato and vine.

“ So far as I can learn, they first appeared in England during the summer of 1845, after which they seem to have travelled, for some time, at least, in opposite directions, the potato disease from the Continent to England, and the vine disease from England to the Continent. It was in a grapery near Margate, in Kent, that the mildew first showed on the vine, and from thence it spread southward. It does not, however, appear that the vintage in France was seriously affected before 1848, when the disease began to create alarm among the vine-growers in some parts of that country ; but, after that period, its spread was rapid both south and north.

“ In 1851, we hear of it being at Genoa, Naples, and onwards to Portugal ; thence to Madeira and Greece, and now all the vine-producing countries of southern Europe are said to be more or less affected. In England, it continued among